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Understanding Skills and Performance Challenges in the Logistics Sector

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Understanding Skills and Performance Challenges in the Logistics Sector: Executive Summary

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Executive Summary

Introduction

This report examines recent changes in the logistics sector with special focus on technological change and the implications for future skills and training needs.

Technological systems are considered to be a 'competitive weapon' for the logistics sector (Piplani *et al,* 2004). These systems can be any hardware or software that automates basic operational processes. However, to gain competitive edge from these technologies, expert knowledge or specialised skills are needed particularly IT skills and analytical skills.

The research draws on an extensive literature review and analysis of the latest UK Employer Skills Survey (UKCES, 2014a), as well as drawing on the insights of employers and stakeholders through fifteen in-depth interviews and three focus groups to provide an assessment of the nature of the knowledge and skills needs required.

The Sector

The logistics sector is vital to the UK economy. It is seen to be a critical enabler in improving the competitiveness of the nation and local economies (DfT , 2011). The ability to connect to local and global markets is a key aspect of a country's capacity and capability to compete, grow, attract investment and create jobs.

The UK logistics sector employs 2.2 million people, one in twelve UK workers, but the sector's performance in the UK lags behind that found in many of our European competitor economies (The World Bank, 2014). The sector particularly underperforms with regard to education and training – ranking 22nd in the extent of staff training provided (World Economic Forum, 2014). This is a concern as the quality of education and training is crucial for domestic economies wanting to move up the value chain (World Economic Forum, 2014). Today's globalised economy requires pools of well educated workers who are able to adapt rapidly to their changing environments.

Logistics, due to technological change, consumer demand and environmental factors is a sector that is undergoing continual change. The workforce needs to be able to adapt, and having the right skills and training in place is vital.

Job roles and the knowledge and skills required in the sector have evolved to incorporate the demands of new technology. They are anticipated to evolve further rather than undergoing a radical switch as a consequence of technology. There is a greater emphasis on individuals being multi-skilled. Mobile, location-based technologies and hand held computer systems are replacing previous paper-based systems, requiring a greater need for IT skills amongst drivers, warehouse operatives and transport office staff. While greater interaction with customers require the addition of enhanced communication and customer service skills.

The most prevalent roles in the sector are machine operatives and elementary occupations, with these accounting for 49 per cent of the workforce (ONS, 2013b). These include roles such as drivers (LGV, van and forklift truck), and warehouse operatives. Looking forward, it is anticipated that the proportion of workers employed in these two groups will decline (UKCES, 2014b). Conversely, it is anticipated that there will be a greater need for higher level occupations: managers, professionals and associate professionals and technical positions.

Technology and the sector

The early adopters of technology in the logistics sector, particularly of mobile technology, tended to be those with sufficient funds and the patience required to work through the early challenges associated with implementing burgeoning technology (Mulqueen, 2014). However, the benefits of these can now be gained throughout the sector as these technologies have matured, become more reliable and capable, and the costs for hardware and communications have fallen. Therefore, where historically the sector, particularly smaller firms, has been slow in the uptake of technologies, this is changing.

Retail logistics in particular has altered significantly in recent years as a consequence of technological advancements (Jones Lang LaSalle, 2013). It has moved from the time where stores were replenished by direct deliveries from suppliers, to centralising store deliveries via new distribution centres in the 1980s and 1909s. Next came import centres processing containerised imports, and then the rise in e-commerce and home purchasing and return deliveries, which are impacting on their distribution network infrastructure. The technology enables retailers and their logistics providers to deliver improved service to consumers, including services such as tracking and tracing of purchases.

E-commerce, however, is still relatively new, and as it continues to grow most retailers and logistics providers are still working out what this will entail for their distribution network infrastructures. The management of the supply chain, including transport modes and storage and warehousing facilities are key aspects that need to be considered.

Retailers and their logistics suppliers are therefore increasingly adopting the Supply Chain Management (SCM) concept in the management of their businesses. Information and Communications Technologies (ICT), such as warehouse management systems, data collection and identification systems and vehicle track and trace systems have become an integral element of competitive capability as it enables higher levels of supply chain integration (Evangelista, 2006).

Each mode of transport has seen technological advancements and concurrent skills requirements change over recent times. Investment in ports has seen them expand and transform from being just freight terminals to Port Centric Logistics Hubs (Mckinnon and Woolford, 2011). This has resulted in port activities diversifying to include rail terminals, warehousing and storage facilities, as well as upgrading quayside cranes, all demanding specialised skills and knowledge to operate the various machinery and IT systems.

Inland rail freight networks and terminals have similarly experienced investments as demand for rail freight increases, while road vehicles continue to undergo technological changes to improve safety and efficiently. Each new technological development requires the knowledge and skills of the operator to be updated.

Intelligent transport systems, such as vehicle tracking and tracing systems, allows fleet operators clear visibility of the mobile workforce, through real-time data. The ability to use the real-time data to identify and deal with issues quickly and efficiently are skills increasing sought within the transport office.

Automated Data Collection (ADC), such as voice technology, bar codes and Radio Frequency Identification (RFID) and Warehouse Management Systems (WMS) have transformed warehouses (Arabe, 2002). Numerous real-time performance reports about the status of goods in the warehouse can be detailed, requiring individuals utilising the systems to have strong analytical skills.

The evidence suggests that the adoption of technology within companies is driven by internal and external driving forces. For example, internal forces include factors related to cost efficiency, company strategy and revenue and cash flow. External factors relate to customer expectations, government legislation and competitors and suppliers. The interviews revealed the companies here were particularly driven by consumer/customer expectations, regulation and compliance and the increasing need to be competitive and operate effectively and efficiently.

Alongside the implementation of technology comes the need for skills. Firstly, individuals need to be able to identify the technologies and then realise the potential benefits of these. The adoption of technology must fit with the business strategy and requires a clear cost-benefit analysis. The technology then needs to be implemented, which could involve several partners working together in a co-ordinated manner, thereby requiring excellent communication skills. The process of implementation needs to be well managed and structured, securing employee buy-in to ensure a smooth adoption across the business. However, the most important aspect of adopting technologies is the need to provide staff training.

Skills gaps and skills shortages

Although the vast majority of employers consider their workforce to be proficient, some 67,339 logistics employees are regarded as not being proficient in their job roles, or as having ‘skills gaps’ (UKCES, 2014a). The proportion of logistics employers reporting skills gaps has increased since 2011, going against the national trend which saw a decrease. This which may indicate a growing problem with the skills levels of the existing workforce

The main skills gaps in the Logistics Sector were reported to be technical or practical skills or job specific skills, planning and organisation skills, customer handling skills, problem solving skills and communication skills (Winters *et al*, 2014 and UKCES, 2014a). These are skills that employers report lacking from applicants.

In most instances representatives of logistics companies interviewed reported that they were able to recruit staff locally. However, employers interviewed noted that the individuals available in the labour market did not always have the full range of knowledge and skills required to be successful in the modern logistics industry.

The sector struggles to recruit specific occupations. But it also struggles with specific talent pools.

The UKESS revealed that a third of sector vacancies were reported to be ‘hard-to-fill vacancies’ – a proportion which has increased since 2011, where 29 per cent of vacancies were reported to be hard-to-fill, suggesting there is increased employer competition and demand for skills (UKCES, 2014a).

The impact of hard-to-fill vacancies includes difficulties introducing technological change. A further consequence reported by nearly half (48 per cent of employers with hard-to-fill vacancies) is that establishments lose business or orders to competitors, which is felt more greatly than when compared to all sector figure of 40 per cent.

A shortage of LGV drivers is not a new phenomenon (Winters and Moloney, 2012) but it appears to be a continual issue. In 2014 drivers were ranked as a top three job role which employers had difficulties filling (ManpowerGroup, 2014) compared to 2012 when it fell outside the top 10. Employers report growing concerns that the problem will be exacerbated by the requirements of the Driver CPC legislation. By September 2014, all professional LGV drivers will need to hold a Driver Qualification Card (DQC). To gain this card, drivers with licences prior to September 2009 need to undertake 35 hours worth of periodic training before September 2014, while new drivers entering the profession must pass all four modules of the Driver CPC initial qualification. The individual must then do 35 hours of periodic training every five years to maintain their CPC.

With more than 60 per cent of all goods moved by road, it is critical that the shortage of drivers is addressed.

Attracting young people is a further problem for the sector. Only nine per cent of the workforce in the logistics sector is under 25, while nearly half (45 per cent) are over 45 years of age. Compounding this is the fact that only 18 per cent of logistics employers had recruited at least one education leaver to their first job, with nearly a third of employers reporting the young person to be poorly or very poorly prepared for work (UKCES 2014b). This is much lower than the all sector figure of 27 per cent and places the sector in the bottom two of all sectors, behind agriculture, for recruiting young people.

Research by Skills for Logistics found that the most commonly identified reason for the struggle to attract drivers and young people is the image of the sector. Young people, in particular, lack understanding of the sector – 66 per cent of 14-19 year olds misunderstood the term 'logistics' (Skills for Logistics, 2009). There is also evidence that individuals 'fall' into the sector, considering it to be a job of last resort (Moloney *et al*, 2011). This in turn makes it harder to attract quality entrants. The driving professional faces further entry barriers, such as cost, the need to generally have two years' experience and to be over 25 for insurances purposes (Transport Select Committee, 2010).

This evidence indicates that recruitment difficulties could be affecting the ability of logistics firms to grow and develop as quickly as they may be able to if they were able to source the required skills more easily. Furthermore, it is imperative the sector overcomes these recruitment challenges to ensure it can fulfil the demand for nearly 1.2 million additional workers by 2022.

Encouragingly, since 2011, there has been a marked rise in the proportion of employers with skills gaps that have taken action to tackle them, such as increasing training activity or spend, though there is still scope for more widespread, targeted responses in the sector to address these issues.

Training and qualifications

In line with more employers taking action to tackle skills gaps, the proportion of employers providing or arranging training has also increased: six in ten (62 per cent) had done so over the previous 12 months compared to 52 per cent in 2011 (UKCES 2014a). This is slightly lower than the all sector figure of 66 per cent, with the sector placed in the bottom five of all sectors for providing training.

There has been a marked increase in the proportion of machine operative staff trained over the last 12 months, but this is likely to have been driven by the legislative requirements of the Driver CPC. Managers were the least likely, with only 34 per cent receiving training. The sector however, trains a much smaller proportion of staff in each occupation than across all sectors.

The implementation of technology has resulted in the need for different skills and employers providing the necessary training. Employers generally undertake this training in-house, with the operation of technologies incorporated within induction training for new staff.

In-house training is developed to ensure it satisfies business requirements, such as compliance and fulfilment of contract obligations, and is therefore seen as valuable to the company by those interviewed. Conversely, there appears to be reluctance in the sector to provide individuals with accredited qualifications. Only a fifth of logistics employers had funded or arranged any training intended to lead to a nationally recognised qualification which is less than all sector findings of three in ten employers (UKCES, 2014a).

Employers fear that accredited training adds value to the individual, making them more attractive to other employers, therefore there is a deep set philosophy amongst many firms interviewed that if staff are trained, they will leave. More needs to be done to show that this is not the case.

Employers in the research strongly favour vocational experience over academic qualifications. HE courses, particularly those without a ‘gap year’ or vocational aspect are not valued. The individual is still seen to have similar developmental requirements as a young person leaving college and entering the sector.

Employers have raised concerns about the quality of training provision, particularly the Driver CPC periodic training courses. Employers would therefore welcome the implementation of a standard that would identify good training delivery in this area. Suggested areas the standard should be set against include:

- Trainer quality – all trainers are qualified to teach the class;
- Course preparation and delivery - the content should attain a core standard and be engaging;
- Learning resources and environment – the learning environment is of professional quality, that lends itself to knowledge transfer;
- Pre and post-training delivery – the provider seeks to support the employer/individual along the learning journey; and
- Commitment to excellence

Looking forward, two thirds of logistics employers (66 per cent) expect that at least some of their staff will need to acquire new skills or knowledge over the next 12 months (UKCES, 2014a). This is slightly lower than across all sectors, where seven in ten employers expect need to acquire new skills or knowledge. In some cases this is likely to reflect the dynamic environment of fast-changing skills needs, where the current skills levels may be sufficient, but over the coming 12 months these skills will become outdated. In other instances, it may be that the employer believes that staff still have the ability to add to their skill set. It is therefore imperative to ensure that the appropriate training solutions are available to employers.

Skill Requirements

The implementation of technology has impacted the skills requirements across the logistics sector. The roles, skills and knowledge needed in the sector have evolved. Roles are not becoming redundant; rather, there is a greater need for individuals to be multi-skilled in many areas, including management roles, drivers, port operatives, warehouse operatives, transport office, IT professionals and trainers.

Skills and knowledge needed include:

- IT skills - for application of the technology, but also website design and development
- Customer service and communication skills – key with the increased demand in home deliveries and direct contact with the end-user
- Contract relationship management - customers are demanding more from the contracts and this needs to be managed effectively
- Compliance awareness – need to adhere to and be aware of incoming rules and regulations, but also be able to comply with contact needs, which may require involved auditing
- Analytical / Reporting skills – many of the technologies and systems hold a vast array of data relating to performance. Workers need to have the skills available to analyse this and identify areas of potential improvement
- Planning - the ability to use historic data as a means to influence future planning
- Problem solving skills – ability to use real-time data to identify and deal with issues quickly and efficiently

- Promotional skills and marketing - not only to promote the companies services, but also to overcome the negative perception of the sector to increase awareness of opportunities to attract new talent.

Conclusions, implications and opportunities

Technology is helping to improve the services that logistics providers offer. The entire supply chain is becoming ever more connected. Consequently data is being collected in ever increasing quantities and the ability to intelligently interpret this and to solve real-time issues is key to many organisations' competitive advantage.

However, changes in technology are accompanied by changes in skills requirements. This research shows that employers have to address labour market issues and plan ahead to ensure there is sufficient supply of skills.

Career information, advice and guidance for employers, careers advisers and other stakeholders to take to schools, events or Job Centres could help to increase awareness and promote the sector to a greater diversity of people.

With the anticipated increase in demand for high level skills and the sector's apparent lack of value in HE courses, there needs to be greater collaboration between industry and academia. This has already begun with NOVUS Trust - an organisation sponsored by a number of Industry Partners that has formed a partnership with the University of Huddersfield and the Chartered Institute of Logistics & Transport (CILT). But these are large employers and only one course. Small and medium sized firms must also be involved, so they can understand the potential value of such courses, and ensure that the all-important vocational element is included.

The mind-set of employers in terms of accredited qualifications also needs to be addressed. There is a deep seated fear that providing accredited training will see the individual leave the firm; the development of positive, sector specific case studies could help to counteract such perceptions.

Employers all raised concerns about the future supply of workers. Young people, in particular, lack understanding of the sector and individuals consider the sector to be a last resort. This in turn makes it harder to attract quality entrants, and employers are faced with skills shortages and skills gaps, within the existing workforce. Sourcing the required numbers of suitably skilled staff is therefore recognised as a key challenge for employers in the sector, which if not addressed will seriously compromise future business growth potential. Employers would therefore benefit from concerted efforts to attract talent to the sector.

Executive Summaries present the key findings of the research produced by the UK Commission for Employment and Skills. More detailed analytical results are presented in Evidence Reports.

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